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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,700	10/08/2004	Dong-Hun Yoon	4971-0102PUS1	4322

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BIRCH STEWART KOLASCH & BIRCH  
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EXAMINER
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BARHAM, BETHANY P

ART UNIT	PAPER NUMBER
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1615

NOTIFICATION DATE	DELIVERY MODE
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04/18/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/510,700	<b>Applicant(s)</b> YOON ET AL.	
	<b>Examiner</b> Bethany Barham	<b>Art Unit</b> 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 12-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/1/08</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Summary***

Receipt of IDS filed on 2/1/08 is acknowledged. Receipt of Applicant's Amended Claims and Response filed on 1/22/08 is also acknowledged. Claims 1 and 12-17 are pending. Claims 1 and 12-17 are rejected.

### **OBJECTION**

Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 14 recites the limitation of wherein the diglyceride comprises 1,2-diglyceride and 1,3-diglyceride, what other option is there? The diglyceride of claim 1 can only be 1,2-diglyceride and 1,3-diglyceride, since 2,3-diglyceride is identical to 1,2-diglyceride; this is not further limiting.

### **NEW REJECTIONS**

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is a fat composition 'comprising' diglycerides (which is open language) and then further includes 'the balance being monoglyceride, triglyceride or a mixture thereof' (which suggests that these are the only things added or closed language). Does Applicant intend to claim a composition of only various glycerides (100% glycerides) and nothing else? Clarification is needed and claim 1 is currently indefinite. Since the claim language contains the 'comprising' open language compositions with other components read on the instant claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 12-17 are rejected under 35 U.S.C. 102(e) as being anticipated by US 7,090,886 ('886).

'886 teaches a fat composition comprising 60-100% of a diglyceride (DG) (abstract). Table 1 teaches examples where the DG is present in an amount greater

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than 85%, triglyceride (TG) is 13.4-16.4 and monoglyceride (MG) is 1.1-3.4. Table 5 teaches another example of DG greater than 85% and that the conjugated amount is 16.4%.

'886 teaches that the MG is incorporated in an amount of 0.1-1.5%, most preferred (col. 3, lines 55-60) and the TG is incorporated in an amount of 6-24.9%, most preferred (col. 3, line 67-col. 4, line 3).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,090,886 ('886) and/or US 7,141,265 ('265).

- '886 teaches a fat composition comprising 60-100% of a diglyceride (DG) (abstract). Table 1 teaches examples where the DG is present in an amount greater than 85%, triglyceride (TG) is 13.4-16.4 and monoglyceride (MG) is 1.1-3.4. Table 5 teaches another example of DG greater than 85% and that the conjugated amount is 16.4%.

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- '886 teaches that the MG is incorporated in an amount of 0.1-1.5%, most preferred (col. 3, lines 55-60) and the TG is incorporated in an amount of 6-24.9%, most preferred (col. 3, line 67-col. 4, line 3).
- '265 teaches a fat powder comprising components A, B, and C; A 15-79.9% of a glyceride mixture containing 5-84.9% of triglyceride, 0.1-5% of monoglyceride and 15-94.9% of diglycerides (abstract). '265 teaches that diglycerides include 1,2-diglyceride and 1,3-diglyceride (col. 2, line 55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use '886 and/or '265 to make a composition comprising high diglyceride content with mixtures of mono and triglycerides for a fat composition for food supplementation.

Claims 1 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,432,453 B1 ('453) in view of US 7,090,886 ('886) or US 7,141,265 ('265).

- '453 teach food supplement compositions comprising glycerol esters of conjugated linoleic acid, wherein the glycerol esters are selected from the group consisting of monoglyceride, diglyceride, triglyceride and mixtures thereof ('453 abstract, claims 1-3). '453 also teach various methods of preparing the diglyceride conjugated linoleic acid such as transesterification, or via acid by reacting CLA and glycerol ('453, col. 5, lines 35-41).
- '453 teaches that the CLA glycerol ester is provided in the dietary supplements from about 32% to about 91% by weight of the conjugated linoleic acid (claim 1)

and that the glycerol ester is selected from the group consisting of monoglyceride, diglyceride triglyceride and mixtures thereof (claim 2).

- '453 does not teach specific percentage of the glyceride components, but does teach mixtures thereof of DG, MG, TG.
- '886 teaches a fat composition comprising 60-100% of a diglyceride (DG) (abstract). Table 1 teaches examples where the DG is present in an amount greater than 85%, triglyceride (TG) is 13.4-16.4 and monoglyceride (MG) is 1.1-3.4. Table 5 teaches another example of DG greater than 85% and that the conjugated amount is 16.4%.
- '886 teaches that the MG is incorporated in an amount of 0.1-1.5%, most preferred (col. 3, lines 55-60) and the TG is incorporated in an amount of 6-24.9%, most preferred (col. 3, line 67-col. 4, line 3).
- '265 teaches a fat powder comprising components A, B, and C; A 15-79.9% of a glyceride mixture containing 5-84.9% of triglyceride, 0.1-5% of monoglyceride and 15-94.9% of diglycerides (abstract). '265 teaches that diglycerides include 1,2-diglyceride and 1,3-diglyceride (col. 2, line 55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine '453 in view of '886 or '265. One of ordinary skill in the art would have been motivated to combine since both teach a fat composition comprising a mixture of glycerides including diglycerides for food and food supplementation. '453 generically teaches a composition of mono-, di- and tri-glycerides including CLA in the percentage instant claimed, while '886 or '265 teaches the amount of each glyceride to

include in such a composition. One of ordinary skill in the art would have a reasonable expectation of success in formulating the composition of '453 in view of '886 or '265, since both teach the same components in a fat composition for food supplementation.

Claims 1 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0147356 A1 ('356) in view of US 7,090,886 ('886) or US 7,141,265 ('265).

- '356 teaches food supplement compositions comprising glycerol esters of conjugated linoleic acid, wherein the glycerides are comprised of a blend of monoglyceride, diglyceride, and/or triglyceride and mixtures thereof ('356 abstract, claims 1, 3, 5). '356 also teaches various methods of preparing the diglyceride conjugated linoleic acid such as dehydrating castor oil, or isomerizing vegetable oil ('356, claims 11-16).
- '356 does not teach specific percentage of the glyceride components, but does teach mixtures thereof of DG, MG, TG.
- '886 teaches a fat composition comprising 60-100% of a diglyceride (DG) (abstract). Table 1 teaches examples where the DG is present in an amount greater than 85%, triglyceride (TG) is 13.4-16.4 and monoglyceride (MG) is 1.1-3.4. Table 5 teaches another example of DG greater than 85% and that the conjugated amount is 16.4%.
- '886 teaches that the MG is incorporated in an amount of 0.1-1.5%, most preferred (col. 3, lines 55-60) and the TG is incorporated in an amount of 6-24.9%, most preferred (col. 3, line 67-col. 4, line 3).



It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine '356 in view of '886 or '265. One of ordinary skill in the art would have been motivated to combine since both teach a fat composition comprising a mixture of glycerides including diglycerides for food and food supplementation. '356 generically teaches a composition of mono-, di- and tri-glycerides including CLA in the percentage instant claimed, while '886 or '265 teaches the amount of each glyceride to include in such a composition. One of ordinary skill in the art would have a reasonable expectation of success in formulating the composition of '356 in view of '886 or '265, since both teach the same components in a fat composition for food supplementation.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 and 12-17 have been considered but are moot in view of the new grounds of rejection necessitated by applicants' amendments. Further, '453 and '356 previously relied on for 102 have been withdrawn and replaced by 103 rejections, but the Examiner respectfully points out that '453 and '356 generically claim the same composition as instant claimed. A patenting of the instant claims would read on the claims of '453 and '356, which all teach a fat composition comprising a mixture of mono, di and triglycerides. Art has now been added which teaches that the ranges as instant claimed are not novel or unobvious but in fact that the glyceride ranges are known and used in other fat compositions.

### ***Correspondence***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bethany Barham whose telephone number is (571)-272-6175. The examiner can normally be reached on Monday to Friday; 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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